

FIG. 1

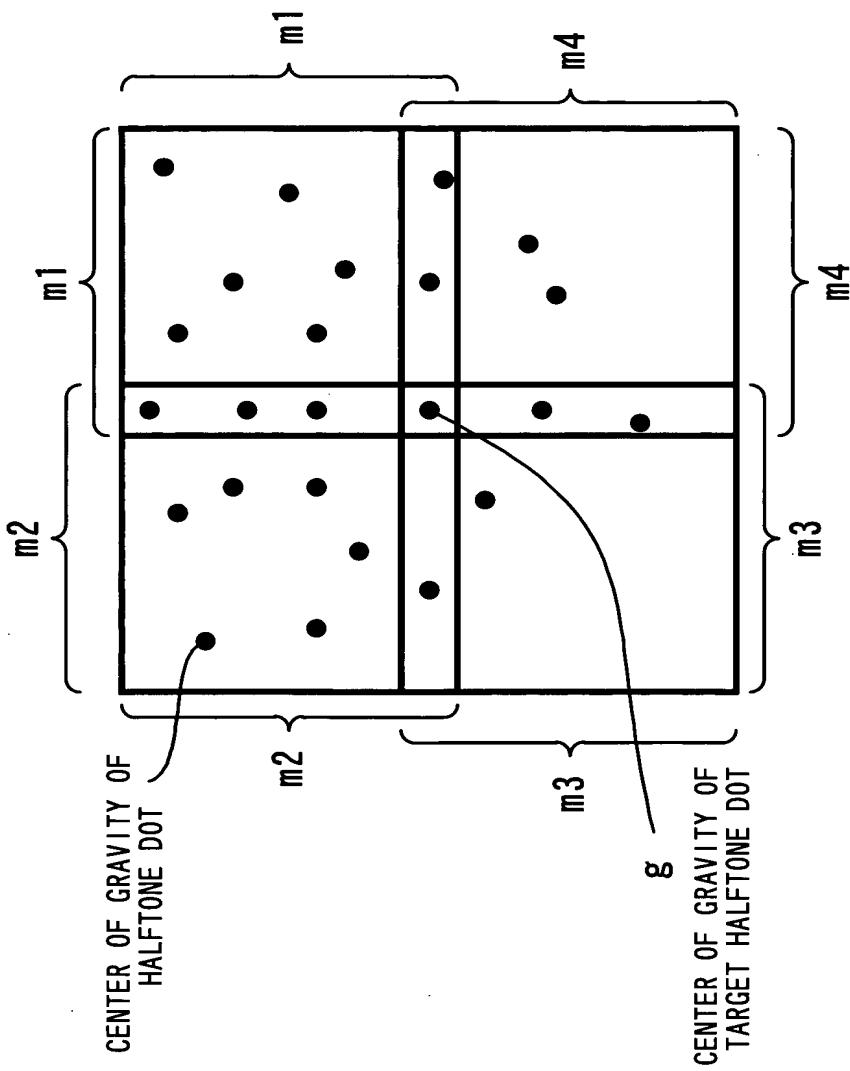


FIG. 2

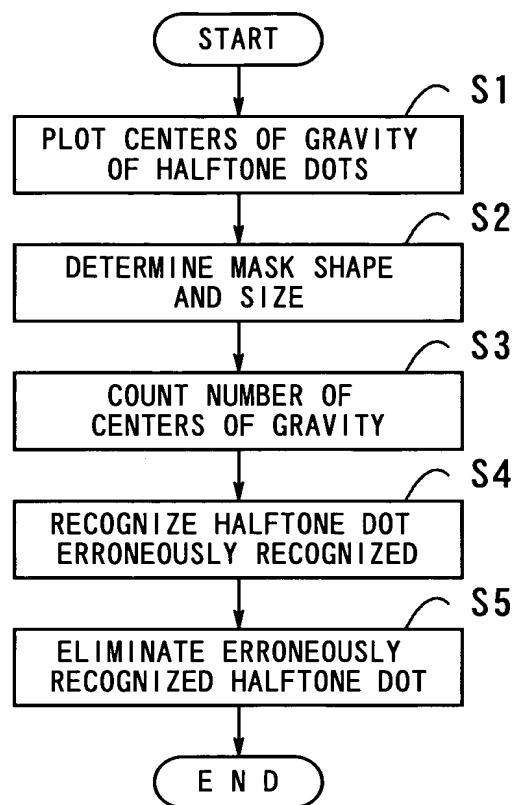
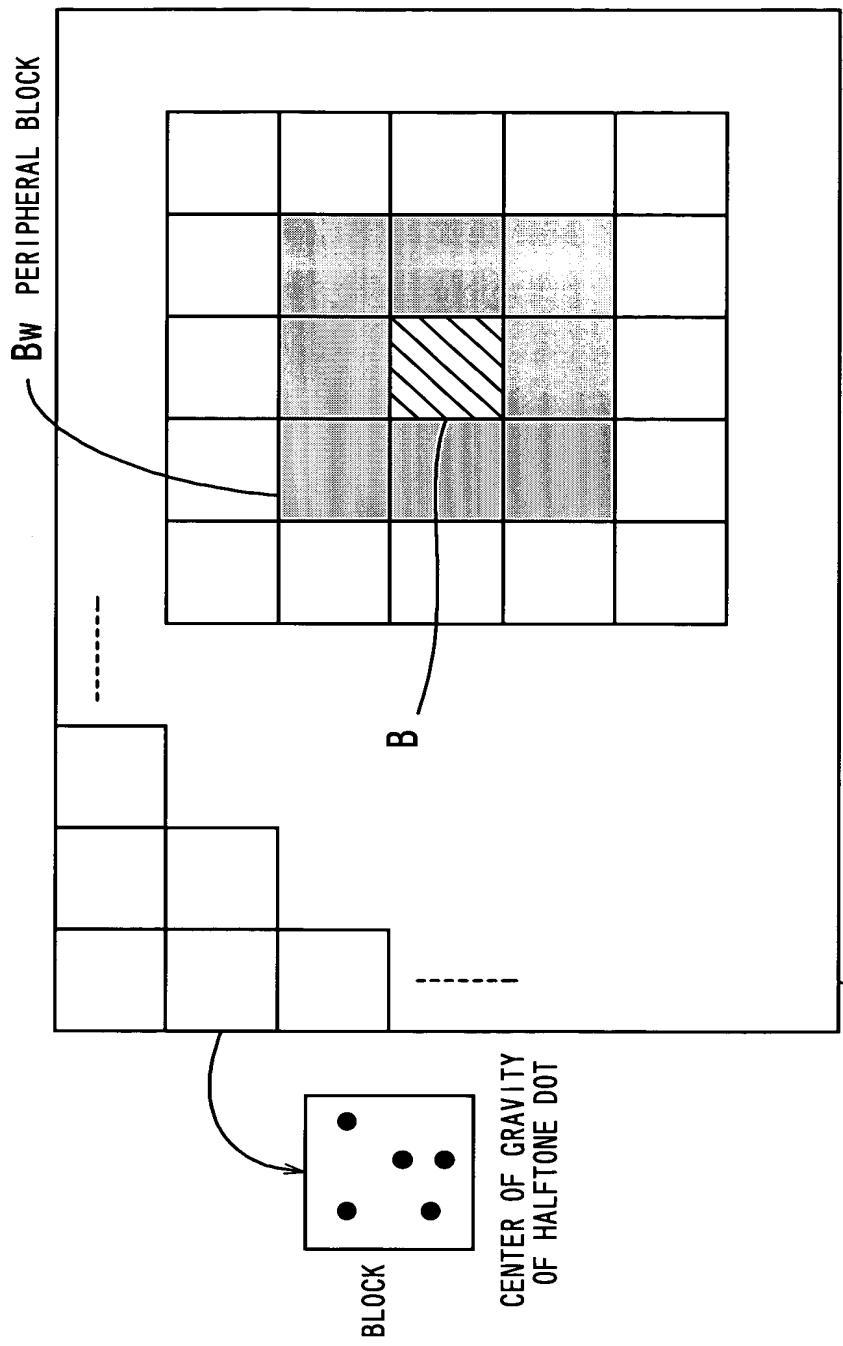
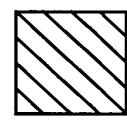


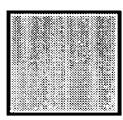
FIG. 3



120



: BLOCK INCLUDING CENTER OF GRAVITY OF
TARGET HALFTONE DOT



: BLOCK SUBJECT TO COUNTING NUMBER OF
CENTERS OF GRAVITY OF HALFTONE DOTS

FIG. 4

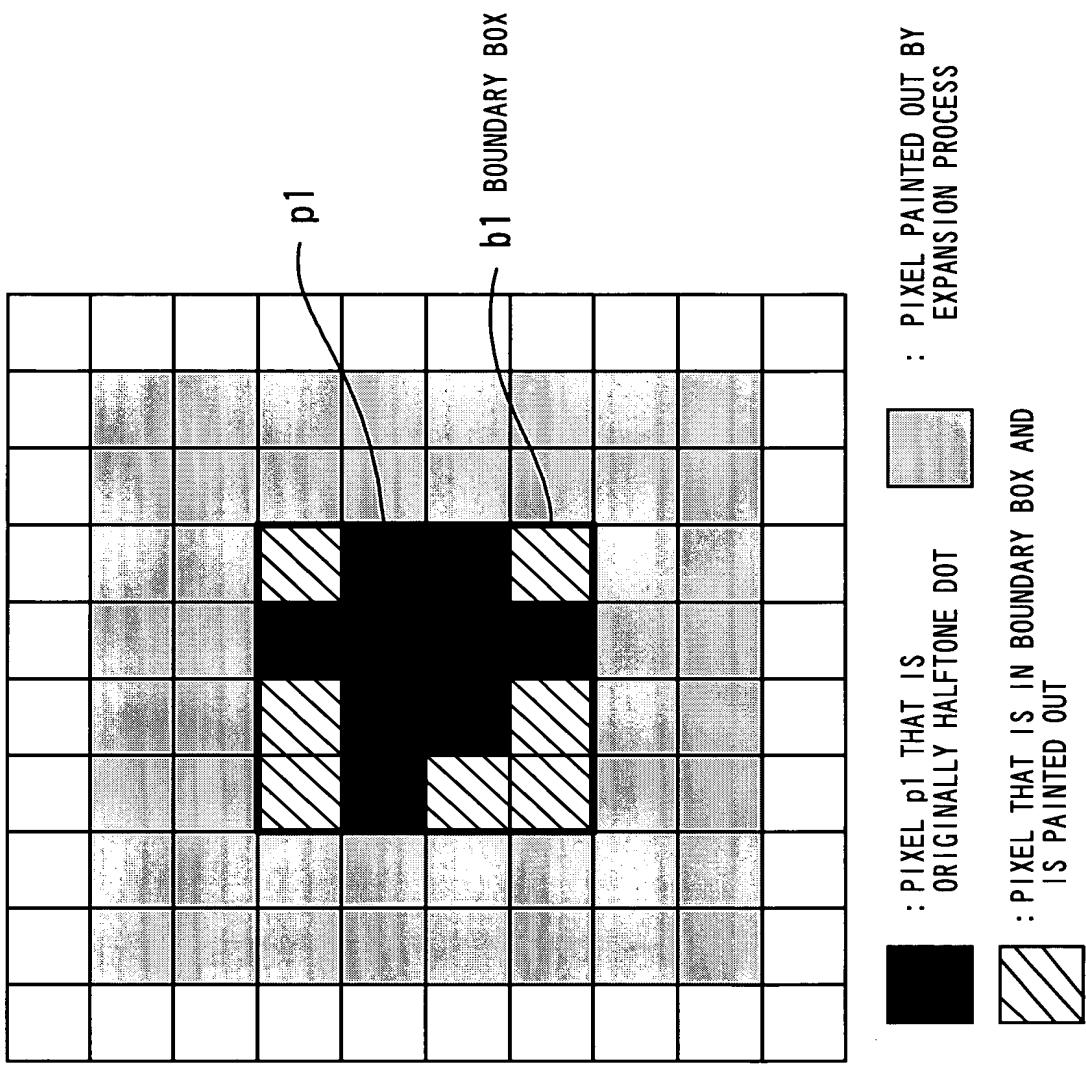
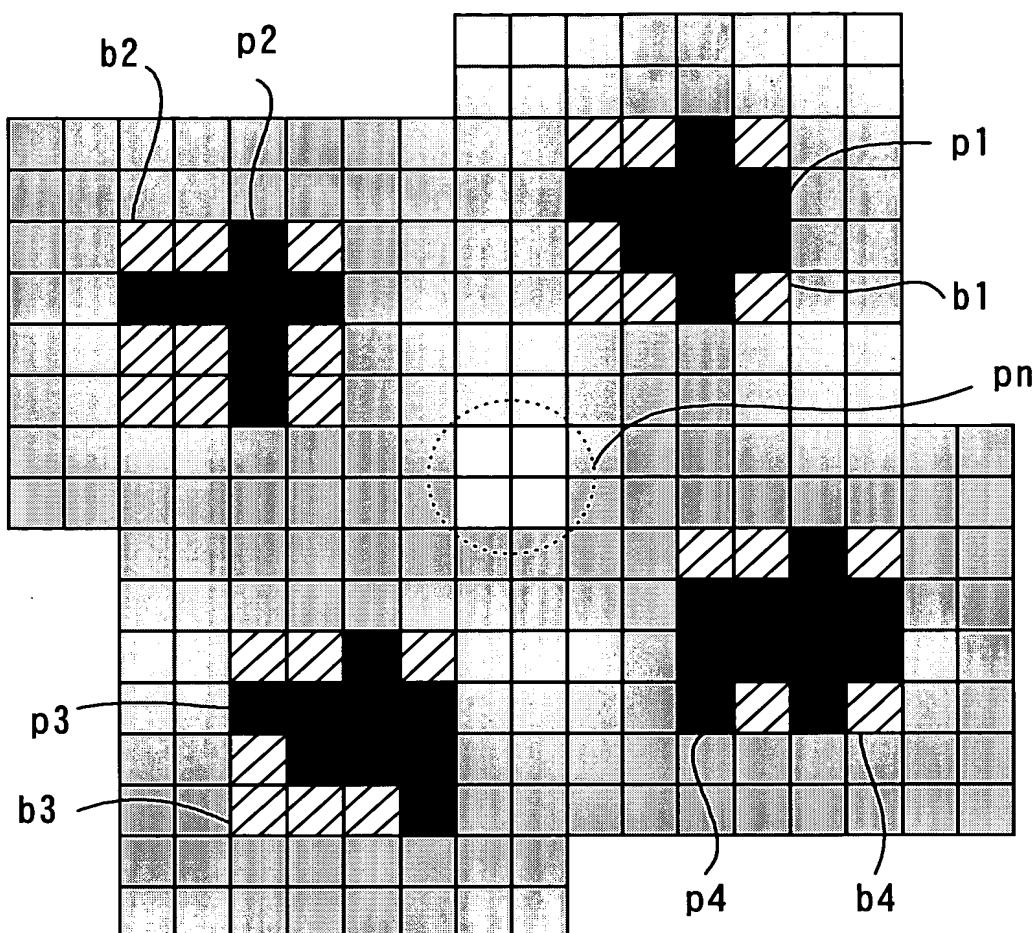


FIG. 5



: PIXEL p1 THAT IS ORIGINALLY HALFTONE DOT

: PIXEL PAINTED OUT BY EXPANSION PROCESS

: PIXEL THAT IS IN BOUNDARY BOX AND IS PAINTED OUT

FIG. 6

FIG. 7

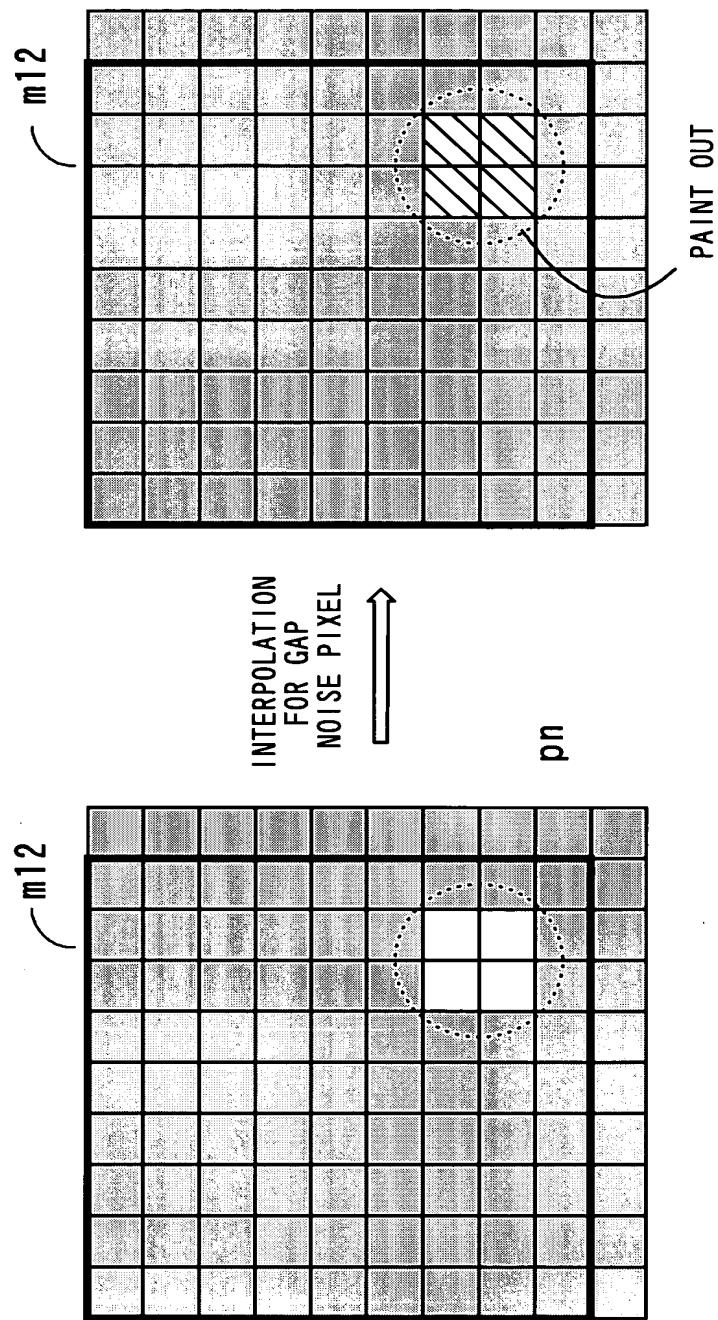


FIG. 8

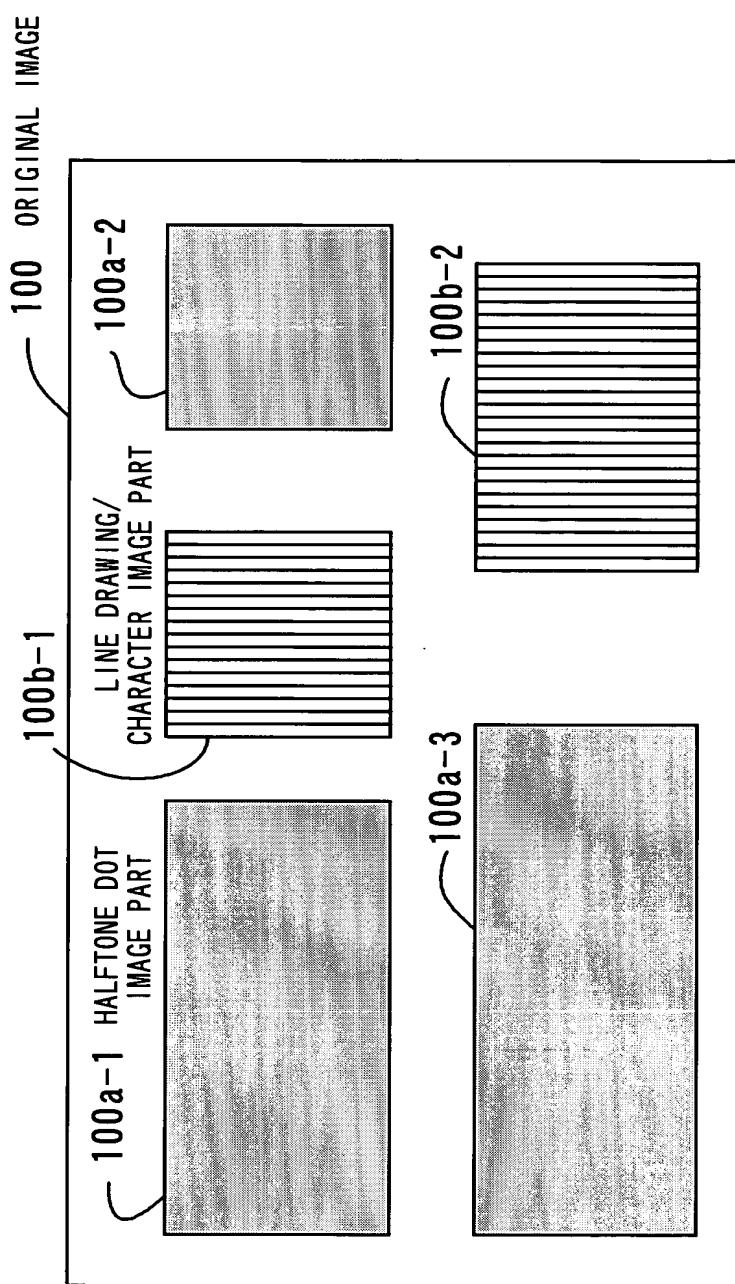


FIG. 9

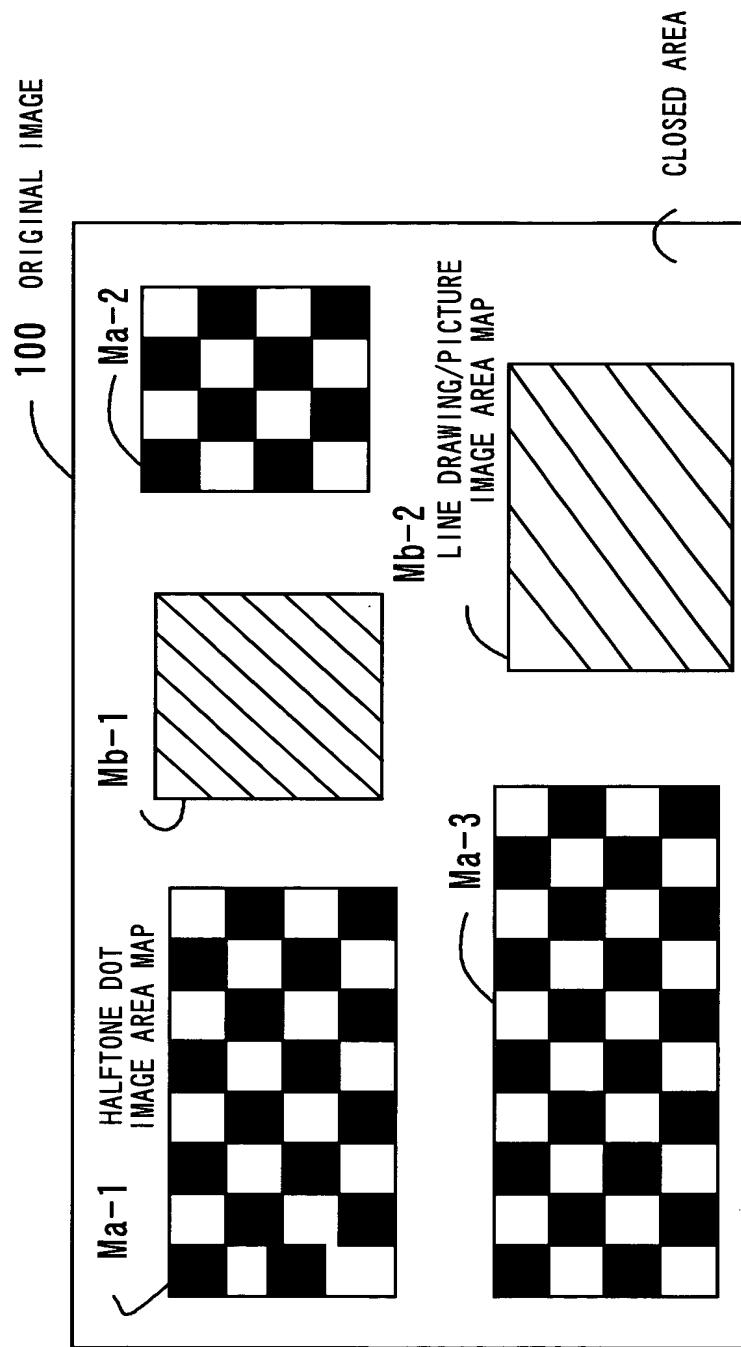
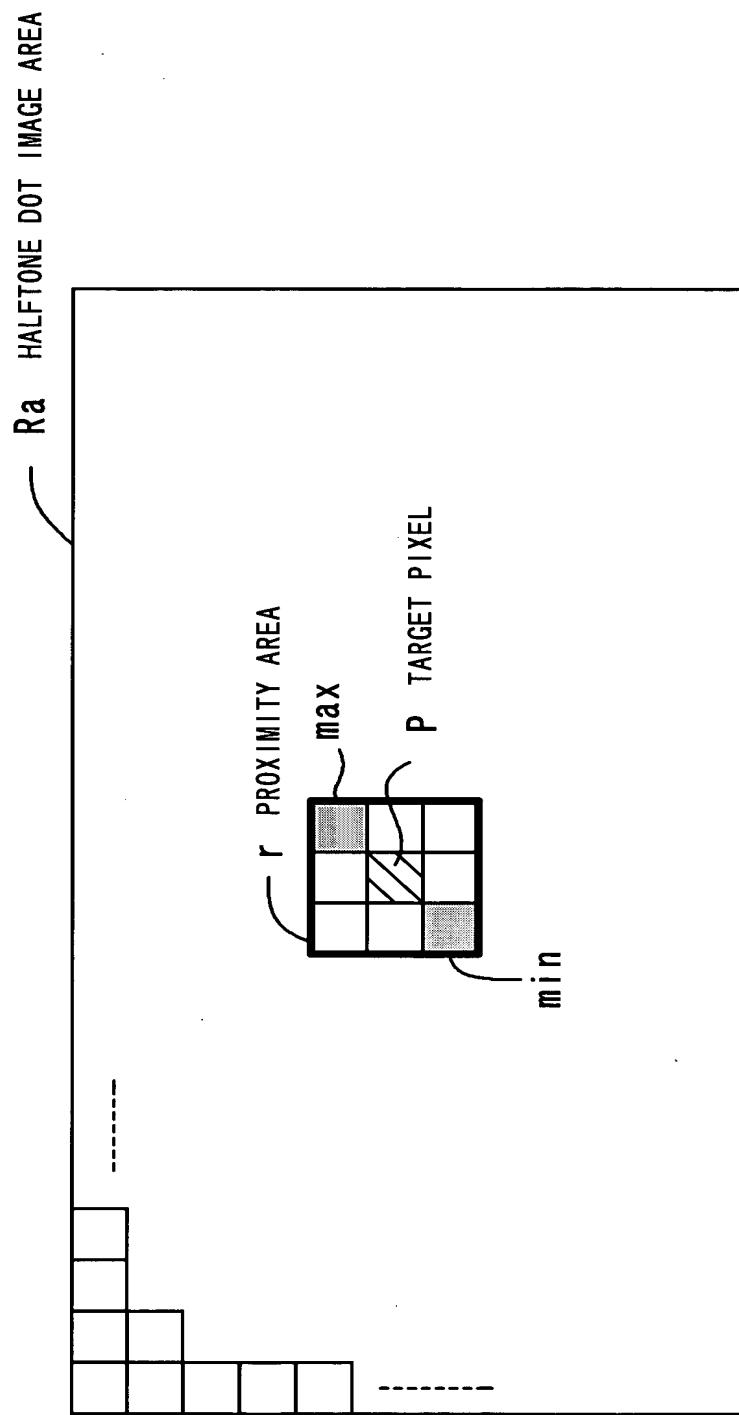


FIG. 10



r1 PROXIMITY AREA

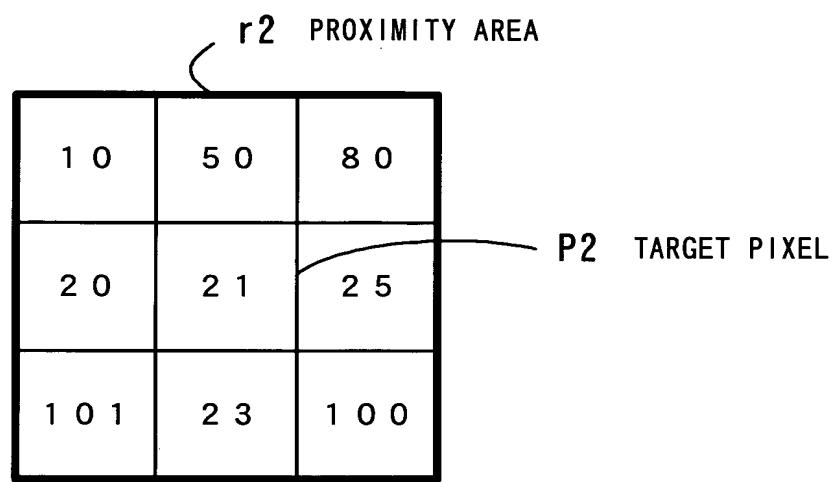
1 0 0	5 0	8 0
2 0 0	2 0 1	2 0 5
2 1 0	2 3 0	1 0 0

P1 TARGET PIXEL

CHANGED PIXEL VALUE $P_a = 230$ (MAXIMUM PIXEL VALUE
AVAILABLE IN PROXIMITY AREA) * α

$$0. \quad 0 < \alpha \leq 1. \quad 0$$

FIG. 11



CHANGED PIXEL VALUE $P_b=230$ (MINIMUM PIXEL VALUE
AVAILABLE IN PROXIMITY AREA) * β

$$1. \quad 0 \leq \beta$$

FIG. 12

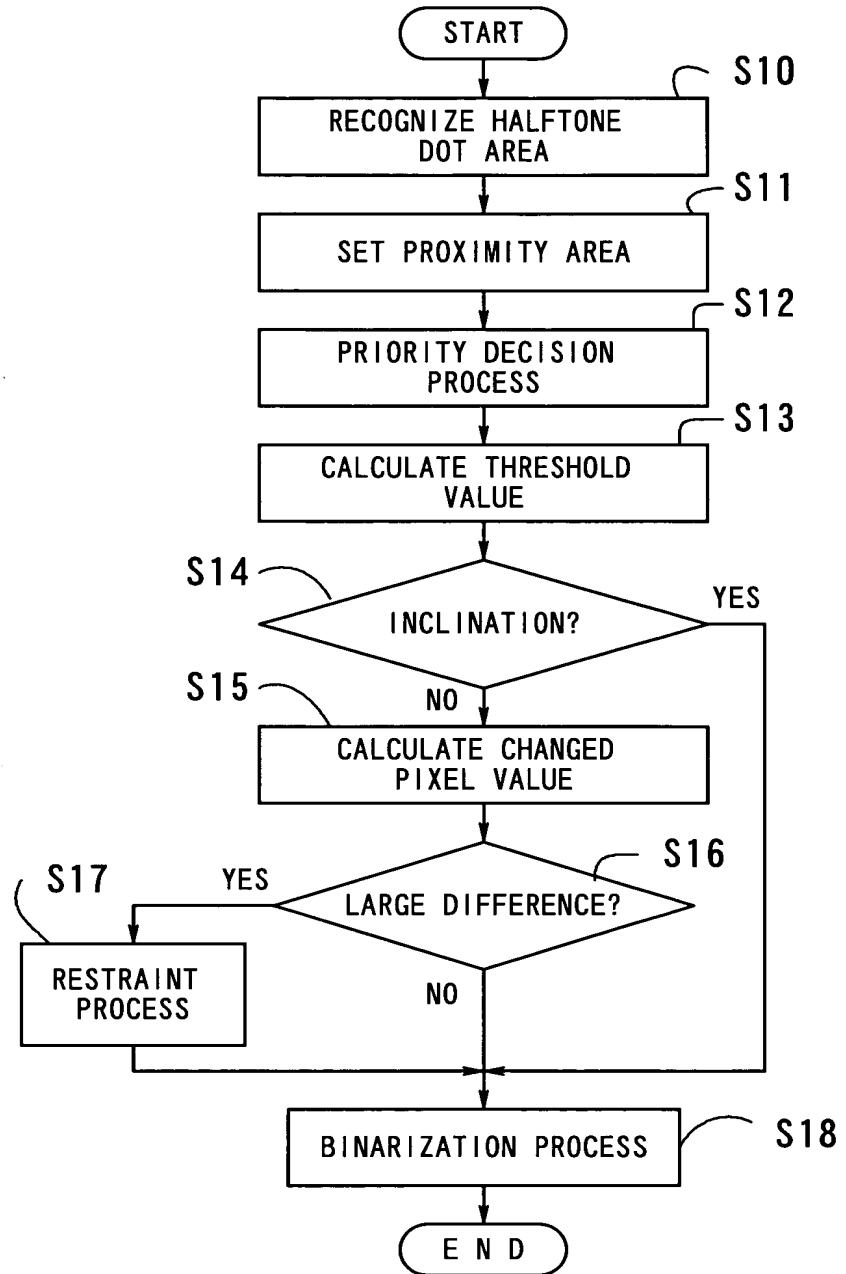


FIG. 13

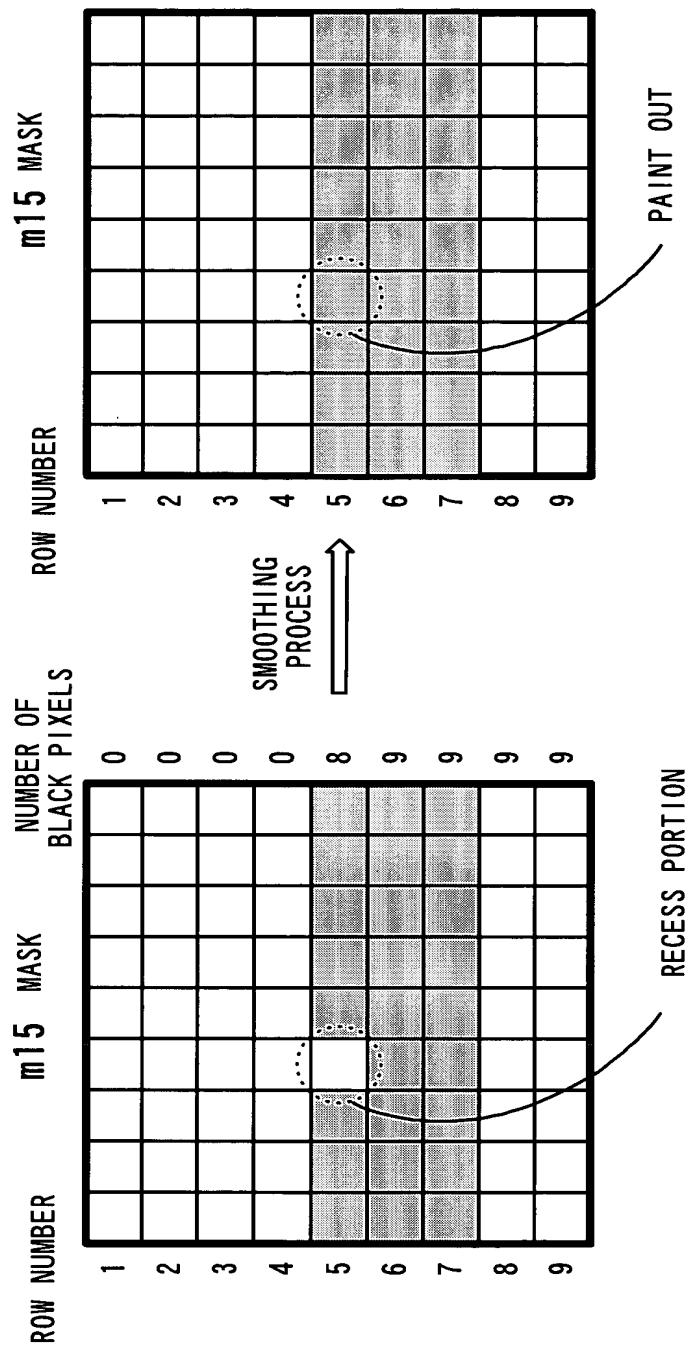
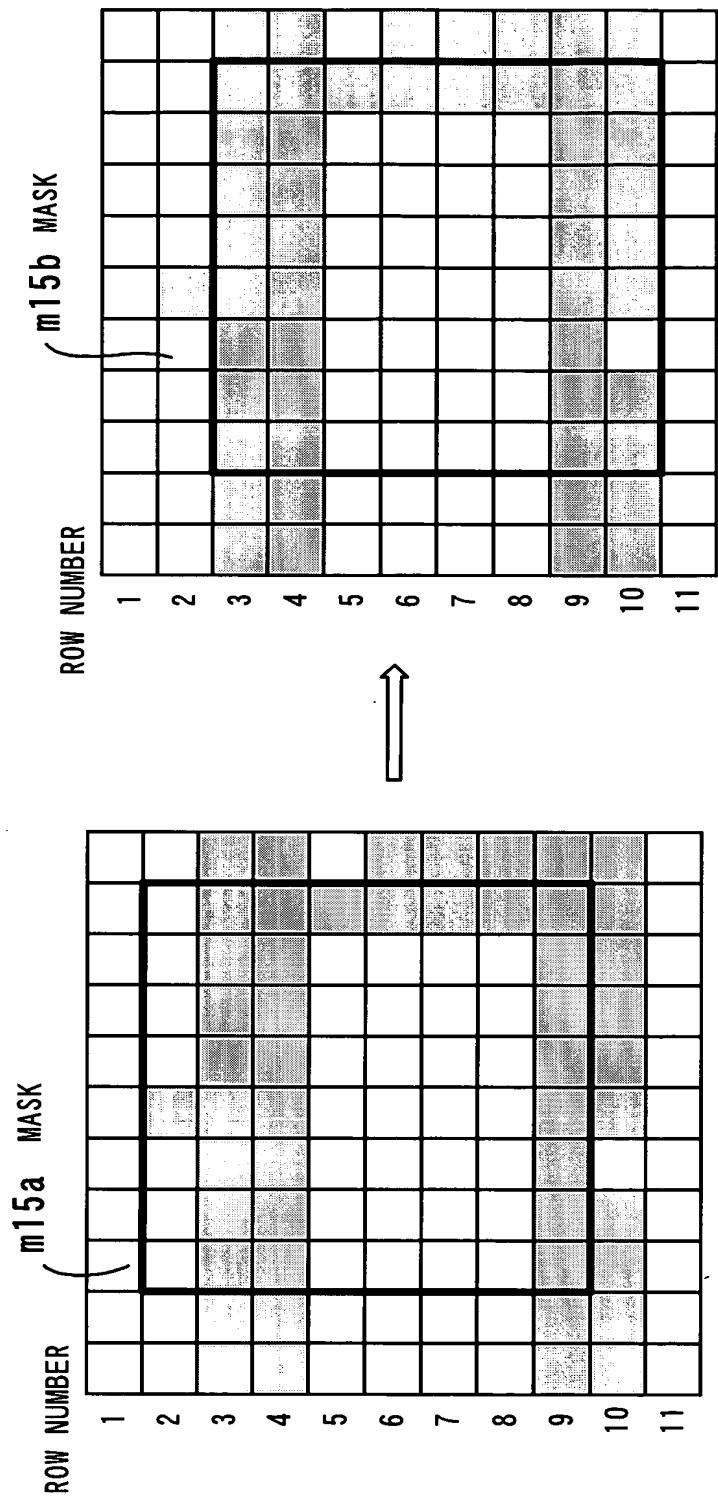


FIG. 14



BEFORE SHIFT ONE-PIXEL DOWNWARD SHIFT

FIG. 15

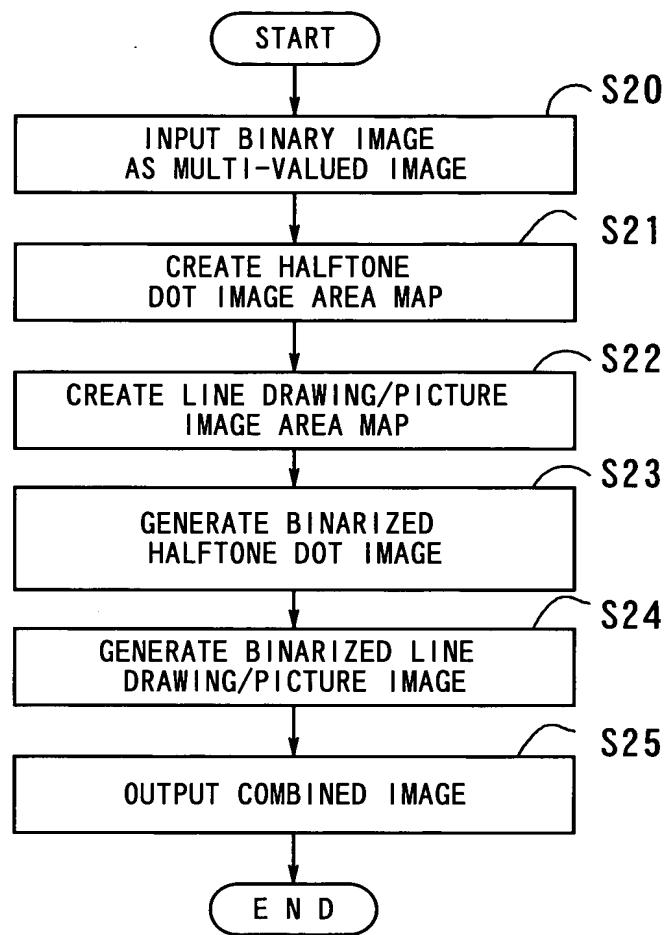


FIG. 16